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RECOMMENDATIONS FOR STRENGTHENING
LIBERIAN EXTENSION SERVICE:
SUGGESTIONS FOR PEACE CORPS ASSISTANCE

by

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Foreign Economic Development Service,
U.S. DEPARTMENT OF AGRICULTURE cooperating with ACTION

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I. OBJECTIVE

This report is the result of a four-week assignment to Peace Corps/ Liberia and the Liberian Department of Agriculture. The two-fold purpose of this assignment was as follows:

To develop recommendations for the full utilization of Peace Corps Volunteers with the Department of Agriculture Extension activities.

To develop recommendations for the strengthening of the Liberian Extension activities.

This study reflects a brief exposure to the Liberian scene. It therefore lacks the detail that could be provided by a study of longer duration. However, the author feels this report will provide general guidance to develop lines of action for the Government of Liberia and Peace Corps/ Liberia.

II. INTRODUCTION

The Republic of Liberia lies at the southwestern extremity of the western bulge of Africa. Its area, estimated at 43,000 square miles, is about the size of Ohio. Liberia is bounded by Sierra Leone to the east, Guinea to the north, and the Ivory Coast to the west.

Liberia is estimated to have a population of about 1.2 million. The population density is about 27 per square mile with an annual growth rate estimated at 1.7 percent.

It is estimated that 75 percent of the nation's total labor force depends on agriculture for a living. Agriculture land comprises about 20 percent of Liberia's total area. Perhaps half the total land area should be considered arable.

Liberia's gross national product (GNP) in 1968 was estimated at \$254 million (U.S.), with a per capita income of about \$225. As the base of its economy, Liberia has three natural resources: iron ore, rubber, and timber. In 1967, agriculture, forestry, and fishing contributed 25 percent of the GNP as compared to 30 percent from mining. Coffee, palm kernels, and cocoa beans are much less important exports.

The staple food of most Liberians is rice and cassava. Both are grown by tribal farmers using the "slash and burn" method of shifting agriculture common throughout much of West Africa.

For several years Liberia has not produced enough rice for its own needs. Currently it imports about 39 percent of domestic consumption, or about 40 thousand metric tons.

The Liberian Government developed a production-action program with the following goals:

- Diversify Liberia's agricultural economy.
- Increase the participation of Liberian citizens in modern agriculture production.
- Increase the incomes of farmers, create purchasing power for people in the rural areas and develop a market for consumer goods.
- Maximize the national income of Liberia through agricultural and forestry pursuits.
- Provide rural and urban consumers in Liberia with more nutritive diets at lower costs.

A key element in achieving the above goals is the farmer; however, the government must serve as a catalyst in such a program. The Department of Agriculture must bear most of the responsibility for helping the farmers become more productive. Institutional constraints such as lack of extension services, shortage of credit, and the poor marketing arrangements are serious obstacles to agricultural development.

This report is directed to the extension activities of the Department of Agriculture and how Peace Corps may assist the Department in achieving its goals.

III. SITUATION

ORGANIZATION OF DEPARTMENT OF AGRICULTURE

The Department of Agriculture has been receiving increased support in recent years as its key role in development becomes more fully appreciated.

The Department of Agriculture employs 600 persons, and a total of 43 Peace Corps Volunteers are assigned to the Department. Figure 1 outlines the organizational structure of the Department, with the number of Volunteers assigned to each specific organizational unit shown in parenthesis.

The National Extension Service of the Department employs 145 persons and has 14 Peace Corps Volunteers assigned to it. Figure 2 outlines the structure of the Extension Service. The number of Peace Corps Volunteers assigned to each headquarters and field unit is again noted in parenthesis. The total number of persons in each extension service position (not including Peace Corps volunteers) is summarized in Table 1.

The Rice Development and Tree Crops Division also have responsibilities in the extension area. They share the responsibility of working directly with farmers; this multi-extension effort often results in coordination problems.

ADMINISTRATION AND SUPERVISION IN THE EXTENSION SERVICE

The Director of Extension is responsible to the Under-Secretary and has two Assistant Directors who report to him. The Assistant Directors who carry the titles of "Assistant Director for Upper Counties" and "Assistant Director for Lower Counties," have four and five County Agents respectively reporting to them. Each of the County Agents supervises 6 to 12 Aides depending upon the staffing pattern of his county. In the counties with larger staffs, there is generally an Associate County Agent to assist with the supervision of field staff.

All of these supervision responsibilities fall well within accepted boundaries of management control. However, it appears that the Aides in the field are not receiving adequate supervision from the County Agent, and that the County Agents are not being adequately supervised.

The Assistant Directors for Upper and Lower Counties report that they are scheduled to visit their counties once every 3 months; however, in actual practice they may visit only once every 6 to 9 months. The level of performance of many of the County Agents and Aides in the field

Figure 1

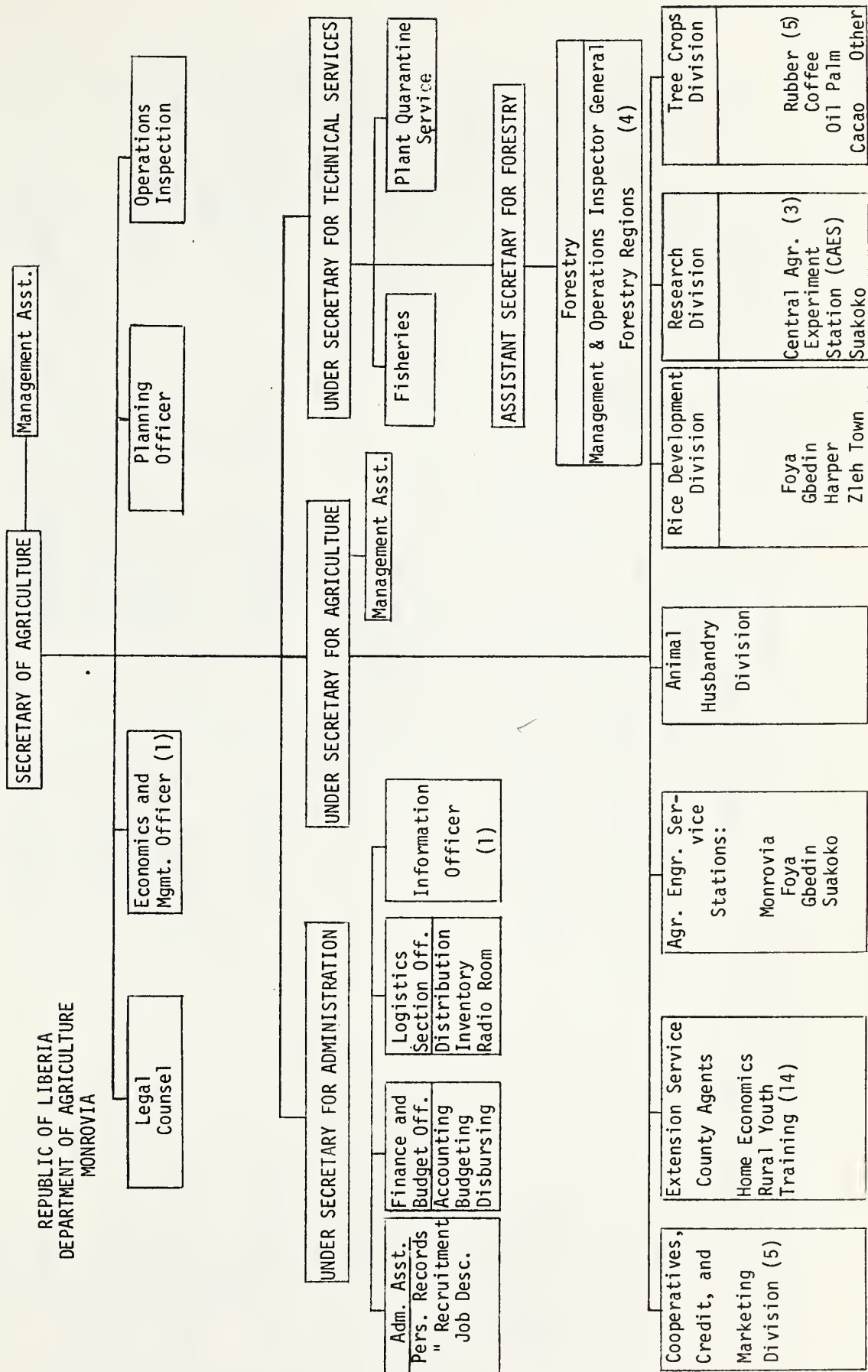


Figure 2

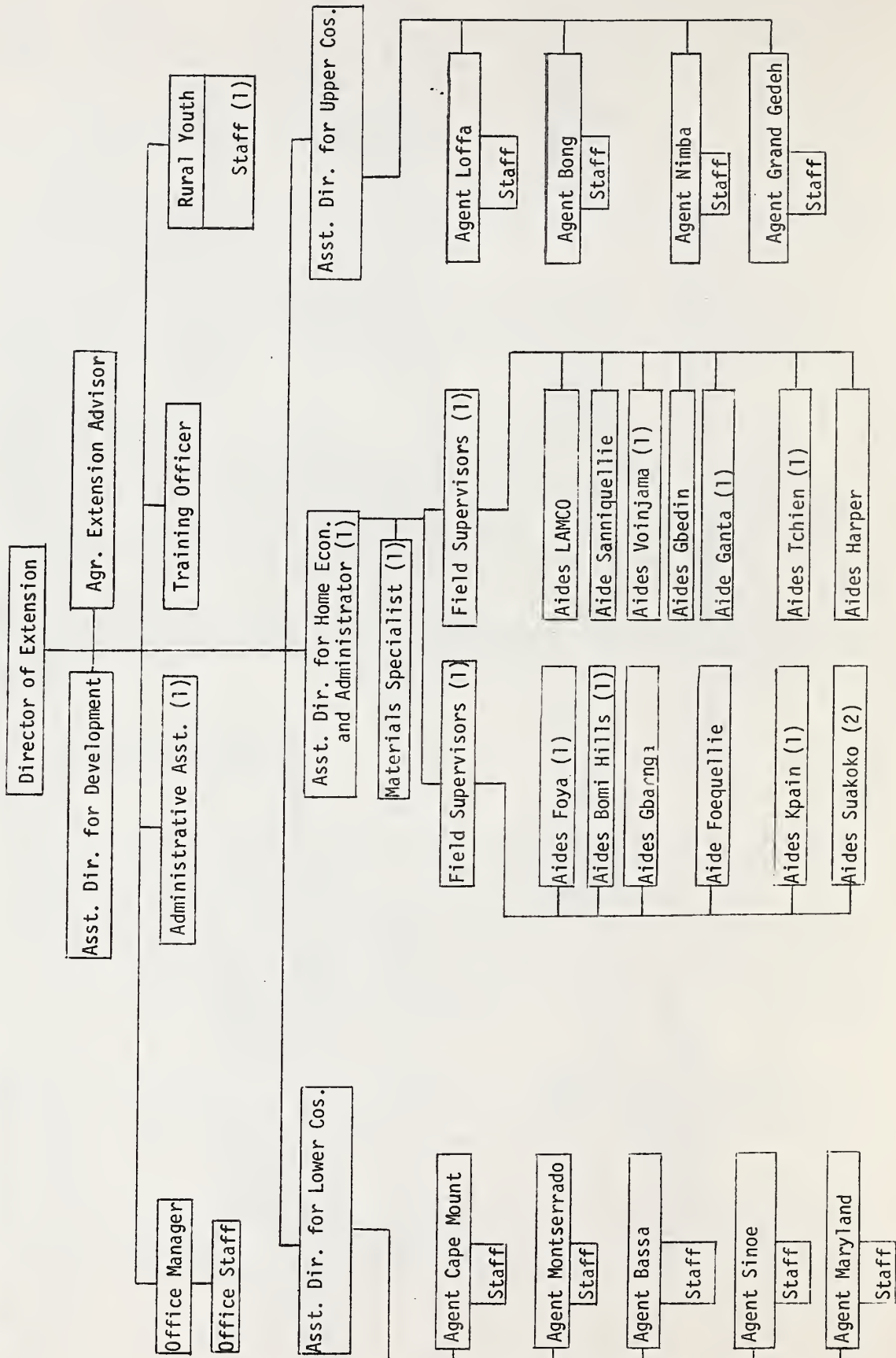


TABLE 1

EXTENSION SERVICE POSITIONS

Director	1
Assistant Director	3
Training Officer	1
Rural Youth Supervisors	3
County Agents	9
Home Economics Supervisors	4
Assistant County Agents	7
Home Economics Teachers	24
Rural Youth Aides	10
Agricultural Extension Aides	76
Clerical Staff	<u>7</u>
TOTAL PERSONNEL	145

indicate that they are not being adequately supervised. Many of the Aides showed in working with farmers that they had not made adequate visits to the farm or had not been effective in the teaching of improved practices.

EDUCATIONAL BACKGROUND OF THE AGRICULTURE EXTENSION STAFF

Table 2 indicates the education grade level that the field and central staff have achieved. It should be noted that this varies from 6.3 years of schooling for the Lofa County staff to 13.5 years of the headquarters staff. This low grade level within much of the field staff indicates a need for considerable in-service training in specific agriculture skills.

BUDGET OF THE EXTENSION SERVICE

Eighty-four percent of the total Extension budget is expended for salaries and only 16 percent to support this staff, according to Table 3. This budget does not provide the transportation, bulletins, visual aids, and demonstration material needed by the field workers to conduct an effective extension program. This small support budget does not allow for adequate supervisory visits to the field.

TRAINING FACILITIES

The Agriculture Extension Training Center (AETC) was established in 1968 to offer practical in-service courses in agriculture and forestry. Instruction has been given in subject matter and extension methods.

The Center is located 17 miles from Monrovia at Johnsonville and is administered jointly by the Department of Agriculture and the University of Liberia. It is administered by a senior officer of the Department, who serves as its director, under the general supervision of the Dean of the College of Agriculture and Forestry of the University. Additional staff here included an FAO extension advisor, a Peace Corps Volunteer serving as an administrative assistant, and one demonstrator in addition to cooks, janitors, and laborers.

The Center has sleeping and dining facilities for 20 persons. Two and one-half acres are available for swamp rice demonstration work, with 14 acres in tree crops, primarily oil palm.

In 1969, 16 persons were trained at the Center; in 1970, 106 participated in the training. To date, 68 persons have participated in courses this year. Table 4 presents additional details on these courses.

TABLE 2

Average Grade Level of Extension Personnel - 9.68

1. Staff	13.5
2. Cape Mount County	8.6
3. Montserrado County	11.2
4. Bassa County	11.2
5. Sinoe County	7.8
6. Maryland County	7.4
7. Lofa County	6.3
8. Bong County	9.5
9. Nimba County	11.5
10. Grand Gedeh County	9.8

TABLE 3

Extension Service Budget

	<u>PERSONNEL</u>	<u>SUPPORT</u>	<u>TOTAL</u>
National Staff	47,912	7,000	54,912
Cape Mount	6,208	1,455	7,863
Montserrat	16,024	2,655	18,679
Bassa	7,836	2,790	10,620
Sinoe	7,668	3,030	10,698
Maryland	10,944	2,655	13,599
Bong	20,892	3,130	24,022
Nimba	19,420	2,680	22,100
Lofa	16,408	2,830	19,238
Grand Gedeh	<u>12,314</u>	<u>2,980</u>	<u>15,294</u>
	165,626 = 84%	31,205 = 16%	
GRAND TOTAL	<u><u>\$196,831.00</u></u>		

TABLE 4

TRAINING PROGRAMS CONDUCTED AT AETC 1969 - 1971

<u>Year</u>	<u>Program</u>	<u>Duration</u>	<u>Trainees</u>
1969	Rice Production: Pre-service, and in-service training for Rice Extension Aides	8 Months	16
1970	Rangers: In-service Training	6 Months	8
	Patrolmen and Guards: In-service Training	2 Months ¹	36
	Teacher's Agriculture Workshop	4 Days	20
	Peace Corps Orientation	10 Days	11
	Home Economics Orientation	2 Weeks	11
	4-H Aides	2 Weeks	20
1971	Peace Corps Orientation	2 Weeks	7
	Home Economics: In-service	2 Weeks ²	21
	4-H Aides	2 Weeks	9
	Tree Crops: In-service	3 Months	11
	Teacher's Agriculture Workshop	2 Weeks	20

1 - Three sessions, two months each

2 - Two sessions, two weeks each

A new AETC building is under construction which will be able to accommodate 40 trainees at a single session. The dormitories housing 20 persons each will enable the center to run two programs simultaneously, or to conduct sessions for both sexes. The new facilities will contain a darkroom and printing machinery so that the Center can develop and disseminate its own training material for extension personnel.

SUAKOKO RESEARCH AND EXTENSION STATION

The Suakoko Research and Extension Station is located in Bong County, 120 miles north of Monrovia. It was established with USAID assistance in the 1950's; however, with the withdrawal of USAID help, the Station's activities tended to languish. In recent years, the United Nations Development Project has been directed toward revitalizing the research and extension efforts.

This Station is an excellent site for rice, vegetable, and livestock experimentation work. It is also located in an area where cocoa and coffee production is possible. Adequate classroom facilities are available, but existing buildings could probably be renovated at reasonable cost. Liberian and FAO staff are available on the Station to teach practical in-service training courses of 1 or 2 weeks duration.

SUPPORTING MATERIAL FOR EXTENSION STAFF

Recently the information office, with Peace Corps assistance, has been issuing a "Department of Agriculture Newsletter." Two hundred copies of this newsletter have been printed per month for 4 months and are serving a useful purpose. The home economics office has also started issuing a newsletter for its staff.

Practical bulletins and visual aids designed to support the field extension agents' work with farmers are in very short supply, however. Several bulletins on cocoa and rubber production are available and two bulletins on 4-H Club work. These leaflets were prepared several years ago with USAID or FAO assistance and have been reprinted. Training classes at the Agriculture Extension Training Center have recently developed some "how-to-do-it" leaflets on growing various vegetables. Still, the need is great for more single "how-to-do-it" leaflets with many line drawings to illustrate various agricultural skills. Simple visual aids in the form of well-illustrated flip charts which can serve as teaching guides for field staff are also needed.

EXTENSION ACTIVITIES IN THE FIELD

A summary of county extension positions is included in Table 5. Bong, Nimba, and Lofa Counties were selected for observation in this study. In each county, it was noted that the quality of work of the Aides varied greatly. In some cases it was obvious the field extension workers were helping the farmers to adopt improved practices; in other areas, the Aides appeared to be doing little or no effective work with the farmers. Specific observations were noted in the following areas.

Rice Programs

Work is being done with swamp and upland rice in each county. The upland rice fertilizer and variety trials were receiving considerable emphasis. These trials are providing valuable information on suitable varieties and fertilizer response in addition to helping gain the farmers' confidence in the Extension Service. Several Aides reported that farmers had requested the trials on their farms next year. The number of trials established by individual Aides varied from 0 to 17. Swamp rice work was being conducted in each county.

Tree Crops Programs

The new approach of establishing tree crops nurseries on individual farms was served. Appropriate sites are selected by the farmer and tree crops Aides. These sites are then to be cleared of bush and shade built before seeds of cocoa and coffee are made available to the farmers. These farmer nurseries will reduce the problems of management associated with large central nurseries and also the transportation of seedlings to the farm. Poor practices observed included the lack of adequate pruning of coffee and cocoa trees, the brushing of coffee plantations, and the planting of coffee seedlings too deep in the ground.

Rural Youth Programs

The rural youth program is in need of considerable attention. Most rural youth Aides report they are working with five clubs in various schools. However, they are generally unable to show well-cared for garden projects or paddy rice fields. They often report they did not get any seeds from the Department to establish a garden. They also complain of lack of cooperation by school principals and teachers. With a few notable exceptions, the rural youth program is rather ineffective and in need of many improvements.

TABLE 5

COUNTY EXTENSION SERVICE POSITIONS

	B O N G	L O F A	M A R Y L A N D	G R A N D G E D E H	M O N T S E R R A D O	C A P E M O U N T	S I N O E C O U N T Y	N I M B A	B A S S A
Extension Agent	1	1	1	1	1	1	1	1	1
Associate Agent	1	2	0	1	1	1	0	1	0
Chinese Technicians	2	2	2	2	2	2	2	2	2
Rural Youth Aide	1	2	1	0	0	1	1	2	1
Rice Aides	3	3	3	3	3	2	3	3	2
Tree Crops Aides	1	6	4	3	2	0	3	6	2
Peach Corps (Tree Crop)	0	0	1	1	1	0	1	1	0
Peach Corps (H.E.)	2	2	0	1	3	0	0	3	0
Home Economics Aides	2	1	2	2	0	0	0	5	0
Vocational Ag. Teacher	0	0	1	0	1	0	1	0	1

Home Economics Programs

Home Economics' Aides were observed in the field giving nutrition and sewing demonstrations to farm women. The Aides generally reported sewing was by far the most popular activity with farm women. The Aides appeared to understand their responsibilities and were conducting good demonstrations. The field staff appeared to be receiving good support from the central office.

GBEDIN RICE PROJECT

This project was established in 1955 with USAID assistance. It was originally designed to be a large rice farm of several thousand acres, managed as one unit so it could be highly mechanized. The project did not prove successful. However, in recent years the project has been revitalized and, at present, 72 families are farming a total of about 200 acres.

Good progress is now being made and the initial AID funded facilities, houses, warehouses, and other buildings are being utilized. However, one problem is that all the farmers on the project consider themselves to be in temporary residence and plan to return to their home after 3 or 4 years.

FOYA RICE PROJECT

This project is located in the Gissi Chiefdom of Lofa County. It presently consists of 700 acres involving about 250 farm families.

This project was started in March 1970 with full cooperation of the Gissi Paramount Chief and the Clan Chiefs. This project satisfies conditions that seem to be conducive to successful rice projects. They are: suitable land in sufficient acreage, adequate supply of irrigation water, and a well-populated location. The Gissi farmers, probably because they have traditionally cultivated upland and swamp rice, have been receptive to paddy rice farming.

The Director of this project stated that the success of the project could be contributed to the cooperation of the agriculture field staff and the good support he was receiving from the central office. He also noted that he delegated as much authority as he could to his subordinate staff. He also reported that a weekly meeting of his technical staff, which consists of heads of various sections, had assisted in maintaining a good flow of information and in coordination.

This project is receiving technical assistance from UNDP and the Chinese Mission in addition to help from Peace Corps Volunteers.

PEACE CORPS ASSISTANCE TO THE DEPARTMENT OF AGRICULTURE

Fourty-three Peace Corps Volunteers (PCVs) are assigned to work with the Department of Agriculture. During the course of this assignment, conferences were held with 25 of these Volunteers. Their assignments are varied, such as administrative assistants, home economics Aides, tree crops Aides, and cooperative managers. With a few exceptions, the Volunteers are enjoying their assignments and feel they are making a real contribution to the development of Liberia. They are adding enthusiasm and hard work to Department activities. They are combining Department resources with their own hard work plus relatively small amounts of Peace Corps materials and achieving results. The good work of the PCV cooperative managers should be noted. These Volunteers, with limited resources, initiative, and hard work, have been able to establish operating cooperatives.

A summary of the PCVs presently in Liberia is listed in Table 6 under the column headed 1971. The 1972 column notes requests for additional Volunteers in 1972. Since about 10 Volunteers are expected to terminate in the next several months, it is expected that agriculture Volunteers in 1972 will number about 65. Since many of the PCVs contribute indirectly to the extension effort, this summary includes the total number assigned to the Department of Agriculture.

Peace Corps/Liberia has been holding special training sessions in-country for PCVs preparing for assignments in agriculture. These Volunteers and their Liberian counterparts have received their training together.

BOOKER WASHINGTON INSTITUTE

The Booker Washington Institute is located at Kakata about 50 miles from Monrovia. It is essentially a high school with agriculture as one of its vocational subjects. It graduates from 20 to 30 students each year in agriculture. In recent years the quality of instruction offered by this Institution has not been at a high level.

In 1969, the Department of Agriculture hired six of their graduates, gave them additional training at the university farm (AETC), and placed them in the field. Last year the Department did not hire any BWI graduates.

COLLEGE OF AGRICULTURE, UNIVERSITY OF LIBERIA

Seventy students are enrolled in agriculture and forestry at the University of Liberia. The first forestry students were enrolled in 1956 and the first agriculture students in 1962.

TABLE 6

PEACE CORPS VOLUNTEERS ASSIGNED TO THE DEPARTMENT OF AGRICULTURE AND
REQUEST FOR ADDITIONAL VOLUNTEERS IN 1972

	<u>1971</u>	<u>1972</u>
1. Office of Economic Planning and Management:		
Economics	1	1
2. Extension Services:		
Administration	1	2
Home Economics	14	0
Rural Youth	1	1
3. Bureau of Forest Conservation:		
Forest Management	3	4
Wood Utilization	1	1
4. Division of Tree Crops:		
Tree Crop Extension	5	3
5. Agricultural Engineering Services:		
Administration	2	0
Mechanics	3	3
Civil Engineers	3	0
Building Construction	1	0
6. Cooperatives, Credit, and Marketing Division:		
Cooperative Managers	5	4
Account Specialist	0	1
7. Rice Division:		
Administration	0	1
Rice Extension	0	11
8. Research:		
Soils	2	0
Agronomy	1	3
9. Quarantine Section:		
Plant Quarantine	0	1

In recent years, the school has been receiving considerable assistance from FAO. Reportedly, there is considerable demand for the University's B.S. graduates by the Department of Agriculture, concessions such as Firestone, and the various institutions recruiting people for teaching positions.

IV. RECOMMENDATIONS

1. THE DEPARTMENT OF AGRICULTURE SHOULD TAKE STEPS TO IMPROVE THE ADMINISTRATION AND SUPERVISION OF FIELD EXTENSION ACTIVITIES

The appointment procedure for junior and senior personnel should be redirected to insure that the most qualified person available fills each vacancy in the Department of Agriculture.

A detailed description of work should be developed for each person involved in extension activities. These job descriptions should be thoroughly discussed with each employee so that he understands what is expected of him.

Every employee's work should be evaluated annually to determine if he is measuring up to the standards set in his job description. His supervisor should give him constructive criticism and he should be helped to improve his performance where needed.

A merit promotion system should be developed whereby those who are doing a good job are fully recognized by promotions and grade raises.

A procedure should be developed whereby an employee who does not respond to constructive criticism can be relieved of his duties.

The delegations of authority from higher to lower levels must be encouraged. Many decisions should be made at a county level if effective extension programs are to be developed.

The status of the County Agent should be raised. He should be given additional responsibility for developing successful extension activities in his county. Each County Agent should have a county extension budget under his control for locally needed demonstration material and supplies. He must also be held accountable for failures and for the improper use of government resources.

A seminar in management and supervision should be conducted for headquarters and field staff, including Associate County Agent level staff. It is suggested that an expert in management and supervision be secured for 4 to 6 weeks to study this area in detail, develop detailed procedures for improvement, and conduct two 1-week seminars for headquarters and field staff. It is possible that the U.S. Department of Agriculture could provide such a specialist, one who has considerable experience in administering agriculture programs, under existing participating agency service agreements.

2. A REGULAR PROGRAM OF IN-SERVICE
TRAINING FOR EXTENSION WORKERS SHOULD
BE INITIATED AND OPERATED ON A
CONTINUING BASIS

The training officer in the Department of Agriculture should be responsible for the organization and execution of training programs for the staff involved in extension activities. All staff should participate in at least one in-service training session each year. Sessions of 2 or 3 weeks duration are much superior to long term sessions of 3 to 6 months. The long term training sessions remove the field staff member from his job for long periods and may also cover subjects which are not relevant to the specific jobs of the field level staff.

These in-service training sessions should include specific subject matter, such as upland rice production, in addition to extension teaching methods. Detailed demonstration guides which include technical information as well as a step-by-step procedure should be developed for each of the major crops.

The facilities of the National Extension Training Center and the Suakoko Research Station should be utilized in these training sessions.

3. THE FACILITIES AT THE SUAKOKO
RESEARCH STATION SHOULD BE EXPANDED
FOR IN-SERVICE TRAINING PURPOSES

Excellent sites are available at Suakoko for training in cocoa, coffee, tropical fruit, and upland and swamp rice. Dormitory facilities should be expanded to serve the Department of Agriculture and Peace Corps Volunteers in training. The National Extension Training Center should continue to be used for University of Liberia students and Department of Agriculture staff needing training in extension methods, home economics, and rural youth.

4. THE INFORMATION SECTION OF THE
DEPARTMENT OF AGRICULTURE SHOULD BE
STRENGTHENED AND MADE DIRECTLY
RESPONSIBLE TO THE UNDER-SECRETARY
FOR AGRICULTURE WHO ALSO CONTROLS
EXTENSION ACTIVITIES

Practical bulletins and useful visual aids are essential to support the field staff in extension work. These bulletins should be prepared in simple English and utilize line drawings to be more meaningful to persons with limited formal education. It is possible with very limited equipment to develop these simple leaflets.

The primary function of the information section is to support extension activities, so this unit should be responsible to the Under-Secretary for Agriculture who also directs extension activities. At least two additional employees should be assigned to this office.

5. ESTABLISH AN EXTENSION PROGRAM
PLANNING APPROACH WHEREBY INVOLVEMENT
OF FIELD STAFF IS SOLICITED AND
EVENTUALLY THE FULL INVOLVEMENT OF
FARMERS IN THE INDIVIDUAL COUNTIES

Extension programs and plans of work are only effective when the field staff at the county level contribute to them and feel a part of the program. Program plans made at the national headquarters are often unrealistic and fail to have the full support of the field staff.

In order to develop programs which more fully reflect the needs of farmers at the county level, a series of program planning, in-service training sessions should be initiated. Two seminars should be held, one session for the upper counties and one for the lower counties. Subjects to be included should be principals of extension program planning, review of the needs of farmers, review of national goals, and a review of resources available.

After discussion of the preceding, extension program goals for each county should be developed, along with plans of work which reflect the month to month activities to accomplish these goals.

In the first year these sessions should involve County Agents, Associate Agents, and two senior technical assistants or Aides from each county. The second year it may be possible for each county to accomplish this planning process in their own county involving all their staff and several farm leaders.

The Department of Agriculture will need outside assistance for these planning sessions. It is possible that resident FAO advisors may be available for this task. The U.S. Department of Agriculture can provide this assistance under participating agency service agreements if experts are not available in Liberia.

6. ESTABLISH A NEW SET OF
GUIDELINES FOR THE OPERATION
OF THE RURAL YOUTH PROGRAM

Four-H Club work is one of the major areas of emphasis according to extension program statements. However, it is not receiving adequate moral and financial support. New direction, program guidelines, and effort are needed to advance this program.

These guidelines should be as follows:

The 4-H Clubs should be based on farms and in homes rather than in local schools.

Every 4-H Club member is expected to complete a project such as vegetable gardening or a rice field on his father's farm.

Volunteer farm leaders should be recruited to serve the clubs. The full cooperation of tribal leaders should be solicited.

Every extension worker should have responsibility for 4-H Club work. A statement of this policy from the Director of Extension is needed and this additional responsibility should be included in the new job descriptions.

Vegetable gardening, which is relatively short term and easy to do, should be emphasized as a 4-H Club project. This project will make more vegetables available to improve diets. Also, there will often be a market for the 4-H Club members' surplus vegetables.

An in-service training program on working with rural youth should be launched. Each training course should be followed up by field visits by the staff of the national rural youth office.

Simple leaflets on "how to organize 4-H clubs" and "how to grow vegetables" need to be developed.

7. ESTABLISH A NATIONAL COMMITTEE TO REVIEW ALL RICE PRODUCTION PROGRAMS AND TO ADVISE THE DEPARTMENT ON THESE PLANS

A national committee of agronomists, economists, extension staff, and university professors should be established to review all rice production plans and advise the Department of Agriculture on the feasibility of these plans.

This committee should carefully review data from the 1971 variety and fertilizer trials. When sufficient knowledge is available on suitable varieties and fertilizer rates and application, one acre upland rice projects should be considered. These should be "package" projects where all the seed, fertilizers, credit, cultural practices, insecticides, and herbicides needed for production have been planned in advance. Extension and rice Aides should consider farmers who have gained experience from the rice trials as prime candidates for this project.

One must think small to gain any large increase in rice production in Liberia. Projects which affect large numbers of small farmers are more likely to significantly increase total production.

The Foya Project which seems to combine several elements necessary for success should continue to be observed and studied. This project should be expanded to use available swampland in the Foya area.

8. THE NUTRITION PHASE OF THE
EXTENSION HOME ECONOMICS PROGRAM
SHOULD BE EMPHASIZED

The good field work of this section should be encouraged, especially the gardening and nutrition phases, which can materially contribute to improved nutrition among the rural people. Liberia has the climate that can produce an ample supply of fresh vegetables and fruits which can improve food habits and health among the rural population, especially the children.

9. APPRAISE THE AGRICULTURE TRAINING
PROGRAMS AT BOOKER WASHINGTON INSTITUTE
AND THE UNIVERSITY OF LIBERIA RELATIVE TO
THE NEEDS OF THE DEPARTMENT OF AGRICULTURE

Graduates of Booker Washington Institute should be prime candidates for extension Aide positions; however, no graduates were hired last year and only five in 1969. This Institute should be able to provide the pre-service training necessary for the extension Aide level. If it is not providing relevant training, then efforts should be made to affect changes in their curriculum.

University of Liberia agriculture graduates should be able to fill County Agent vacancies. Careful coordination between the Department of Agriculture and the University of Liberia is needed to recruit suitable students for training and also to insure the best possible training for future agriculture staff.

10. PEACE CORPS VOLUNTEERS CAN HELP
STRENGTHEN THE INFORMATION SECTION
AND THE WORK OF THE COUNTY AGENTS

Peace Corps Volunteers presently assigned to the Department of Agriculture have proven themselves to be of very valuable assistance in development projects. Four additional Peace Corps Volunteers should be assigned to the expanded information office to develop simple "how-to-do-it" bulletins to support the field staff. Also, nine additional PCVs should be assigned to each of the nine County Agents in Liberia. A mature Volunteer would be most helpful in this task. The National Association of County Agricultural Agents should be contacted to determine if they might help in the recruitment of these Volunteers.

11. THE FUNDS BUDGETED FOR SUPPORT
EFFORTS SHOULD BE INCREASED RELATIVE
TO FUNDS FOR PERSONNEL

Extension agents in the field without supplies for demonstrations and transportation are severely handicapped in doing their work. Field agents who do not receive adequate supervision from county or national levels because of a lack of support funds for travel are also hampered. It is suggested that every effort be made to secure an increased budget for both personnel and support. If this is not possible, then some vacancies should be allowed to develop in order to maintain support for a smaller but well-trained and well-supervised staff.

12. SENIOR DEPARTMENT OF AGRICULTURE
OFFICIALS SHOULD CONTINUALLY EVALUATE
ALL EXTENSION ACTIVITIES

The following are suggested criteria for evaluating the extension activities:

1. Are the established objectives clear and understandable?
Do they accurately represent the mission which the Extension Service is supposed to accomplish?
2. Are plans well drawn to achieve the established objectives?
How well are they understood throughout the organization?
3. To what extent are work standards well set, applied, understood, and used throughout the organization? Does every employee know what a good day's work is for his particular job?
4. Is the work done by the easiest, simplest, and most economical method? Is there a minimum of wasted manpower and money? Do the employees generally make suggestions for improving methods of doing their work?
5. Are realistic schedules for all operations carefully developed and used throughout the organization? How well do the employees understand and respect these schedules?
6. Is there a carefully designed system in use for determining how well the services meet the established standards?
7. Do the employees generally demonstrate confidence in management at all levels?
8. Are the employees generally proud of their organization and of their own work?

If, after a review of extension activities, one is able to give positive answers to most of the above questions, then one can assume extension work is making good progress.

13. QUARTERLY STAFF MEETINGS SHOULD BE
REORGANIZED TO INCLUDE IN-SERVICE TRAINING
AND MORE COMMUNICATION BETWEEN SENIOR
STAFF AND COUNTY STAFF

Present quarterly meetings of the County Agents are primarily a report reading session. Agents often travel 2 days to reach these meetings and do not contribute much to these sessions nor do they receive very much help and guidance from the meeting.

It is suggested that all future meetings be 2-day sessions with most of the time devoted to in-service training. These sessions should serve as reviews for the County Agents and also provide information on how to proceed on specific programs.

Effective program planning sessions, as previously recommended, should involve the County Agents in planning programs to a greater extent and should reduce the "bickering" that now characterizes these meetings.

Senior staff must listen, answer questions, and communicate with the County Agents in these meetings.

14. AGRICULTURE EXTENSION STAFF MUST
BECOME DEDICATED TO THEIR JOBS AND USE
GOVERNMENT RESOURCES IN A MANNER FAIR
TO THE FARMERS AND PEOPLE OF LIBERIA

Economic progress often means that countries must be willing to critically look at their institutional structures and make fundamental changes. Liberia is no exception.

The extended family is a strong element in the Liberian local culture. The Liberian Government has tended to function only as a control element in response to major concern over gaining control of the interior and surviving as a nation. These are logical consequences since many of the Liberian social, economic, and political institutions have been developed around the idea of survival.

Still, because of this background, the Liberian institutions are often ill-equipped to serve as vehicles for systematic and creative economic development to serve human needs. The Government must transform itself from a controlling force to a service force if economic development goals are to be realized.

Likewise, the County Agent must recognize that his function is one of service to his farmers. In order to serve the farmers, government employees must be dedicated to their tasks and willing to give a full day's labor for a day's pay. They must insure that scarce resources of staff and off-farm inputs be effectively used in rural development.

15. SENIOR DEPARTMENT OF AGRICULTURE
OFFICIALS SHOULD FULLY CONSIDER THE FACT
THAT EXTENSION ACTIVITIES ARE ONLY ONE
ELEMENT IN AGRICULTURAL DEVELOPMENT AND
THAT THE INFRASTRUCTURE SERVING AGRICULTURE
MUST INCLUDE MANY ADDITIONAL INPUTS AND
CONDITIONS

The development of an effective extension service is only one element - the farmers of Liberia need credit, markets, price incentives, and off-farm inputs such as fertilizer and improved seeds. The infrastructure must also include roads to move the increased produce to market. Therefore, when an expanded extension program is started, there should also be provisions for the other services that are necessary for the farmer to increase his production.

16. PEACE CORPS TRAINING SESSIONS FOR
AGRICULTURE VOLUNTEERS AND THEIR LIBERIAN
COUNTERPARTS SHOULD BE CONTINUED AND EXPANDED

The facilities of the National Extension Training Center near Monrovia and the proposed expansion of facilities at the Suakoko Research Station are excellent sites for pre-service and in-service training for Peace Corps Volunteers and their Liberian counterparts. The training of Volunteers and counterparts together encourages cooperation and also does much to strengthen the abilities of the Liberian agriculture staff. This training is also an effective method of fully using the talents of consultants and technical assistance staff with both the Volunteers and counterparts.

17. PEACE CORPS VOLUNTEERS SHOULD BE
FULLY INTEGRATED INTO ALL PRESENT AND
PROPOSED IN-SERVICE TRAINING IN THE
DEPARTMENT OF AGRICULTURE

The proposed training sessions in management and supervision, program planning, and the regular in-service sessions should include Peace Corps Volunteers when these individuals are serving as a counterpart to Liberians who are attending those sessions. If the Volunteers were assigned to work with County Agents, then these individuals should participate in all training sessions for County Agent level staff.

PERSON INTERVIEWED RELATIVE TO
AGRICULTURAL EXTENSION PROGRAMS

N A M E

T I T L E

Tuesday - September 21

Jordan Holtam

Associate Peace Corps Director

Wednesday - September 22

Julius E. Cooper

Under Secretary of Agriculture

Louis Russ

Head, Office of Economy, Planning,
and Management

Dave Hendershot

Peace Corps Volunteer

Dugger Harris

Assistant Agriculture Attache

Herbert Tyson

Peace Corps Director

Norton Berman

Deputy Director Peace Corps

Jim Emerson

Food and Agriculture Officer, AID

Thursday - September 23

Richard Kraemer

PCV, Admin. Assistant University
Department of Agriculture Farm and
Agriculture Extension, Training Center

Edward Reifler

PCV, Econ. Planning

Adlai Arnold

Agriculture Economist, USAID

Herschel Ellis

Agriculture Marketing Adviser, USAID

Friday - September 24

Fran Smith

PCV/Agriculture/Home Economics

Vicky Nighswander

PCV/Agriculture/Home Economics

Saturday - September 25

Tommy Tsu

FAO Extension Adviser to
National Extension Training Center

Monday - September 27

James Hickson

Agricultural Attache, U.S. Embassy

Tuesday - September 28

D. Jones A. Sirleaf

Agricultural Extension Service Director

Wednesday - September 29

Allen Carpenter

Rice Agronomist UNDP

Nehemiah Greene

County Extension Agent, Bong County

Maude Dennis

Home Economics Supervisor, Bong County

Martha Keller

Home Economics Agent, Bong County

John E. Murray

Tree Crops Technician, Bong County

John W. Graham

Rural Youth Aide, Bong County

James Cole

Rice Aide, Bong County

Moses M. Lewis

Rice Aide, Bong County

Thursday - September 30

Attended quarterly staff meeting of the Agricultural Extension Service which included control staff, county agents, and the home economics and rural youth staff.

Friday - October 1

Christian Bishop

Director, Tree Crops Division

Joseph Campbell

Project Manager, Gbedin

Alfred Fromayan

Assistant Director, Extension Service

James Bedell

Assistant Director, Extension Service

John Wilson

Information Officer

Harry Pennoh

Rural Youth Supervisor

James Newman

Assistant Rural Youth Supervisor

Monday - October 4

Larry Pearmine	PCV Gbedin Cooperative
Harold Jacobson	PCV, Mechanic - Gbedin
Leopold Badoo	County Agent, Nimba County
Mrs. Annie S. Grimes	Home Economics Aide, Lamoo
Mrs. Alice Bricase	Home Economics Aide, Lamoo
Emmanuel Wreh	4-H Club Instructor
Patrick O'Dinkah	Rice Aide, Karnplay
James Karneh	Tree Crops Aide, Karnplay
Mark Zelonis	PCV - Tree Crops Technician, Karnplay
Hon. Samuel T. Voker	Superintendent, Nimba County
Paramount Chief John Woto	Nimba County, Karnplay

Tuesday - October 5

George Padmore	Rice Aide, Ganta
Gray Page	Tree Crop Aide, Sacepea
Enoach Dologyea	Tree Crop Aide, Bahn
Alfred Sayeh	Rice Crop Aide, Bahn
James Herrington	Tree Crops Aide, Gbatua
John Woto	4-H Club Instructor, Bahn
George Varmie	Tree Crop Aide, Graie
David Dopka	Associate Agent, Tappita
Sister Gloria	Home Economics, Saniquelle

Wednesday - October 6

Mr. Hoover Dennis	County Agent, Lofa County
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Thursday - October 7

Kundu Fainah

Rice Aide, Voinjama

Ernest Johnson

Tree Crops Aide

J. M. Johnson

Extension Aide

Mo Worwor

Rice Crops Farmer

Mr. Lima

L.P.M.C. Agent

Mr. Marcus

Manager - L.P.M.C.

Friday - October 8

James Clark

PCV, Mechanic

Patricia Finch

PCV, Home Economics

Michael Holmes

PCV, Civil Engineer

Saturday - October 9

Moses Elliott

Director, Foya Rice Project

Tom Volz

PCV, Manager Agriculture Coop

Monday - October 11

Frank Seimavula

Horticultural Crops Supervisor,
Booker T. Washington Institute

Tuesday - October 12

Clement K. Koha

Acting Dean, College of Agriculture
University of Liberia

Paul C. Ma

Manager, UNDP/FAO Project,
University of Liberia

1. Clarke, James , Anna , Adam , Matthew	Foya Kama Foya Kama Foya Kama Foya Kama	Agric. Mechanic Agric. Home Economics
2. CROCKETT, Roger	Monrovia	Agric. Maint. Admin.
3. DESAUTELL, Cheryl	Voinjama	Agric. Home Econ.
4. DICKINSON, Lorna	Sgt. Kollie Town	Agric. Research
5. DURNER, Randy	Zuinpa	Agric. Forestry
6. EGGLEER, Kathleen	Yekepa	Agric. Home Economics
7. FINCH, Patricia	Foya Kama	Agric. Home Economics
8. GOLDMAN, Richard	Harper	Agric. Cooperatives
9. HELMES, Michael	Sgt. Kollie Town	Agric. Civil Eng.
10. HENDERSHOT, David	Monrovia	Agric. Extension Admin.
11. HERMANSON, Harvey	Sgt. Kollie Town	Agric. Research
12. , Marie	Sgt. Kollie Town	Agric. Home Economics
, Marguerite	Sgt. Kollie Town	
13. HOWARD, Draig	Bomi Hills	Agric. Tree Crops
14. JACOBSON, Harold	Gbedin	Agric. Mechanic
, Ruth	Gbedin	Agric. Health
15. JOHANNES, John	Pleebo	Agric. Tree Crops
16. JOHNSON, Dick	Bomi Hills	Agric. Forestry
17. KAERCHER, Diana	Zwedru	Agric. Home Economics
18. KARNES, Dan	Zwedru	Agric. Tree Crops
, Joyce	Zwedru	Education
19. KOLKMEYER, Jack	Monrovia	Agric. Rural Youth
, Rebecca	Monrovia	Education Library Sci.
20. MITCHELL, John	Kpain	Agric. Cooperatives
21. MODENA, Tom	Sgt. Kollie Town	Agric. Civil Eng.
22. MULCAHY, Jean	Harper	Agric. Home Economics
23. NEED, Harry	Gbedin	Agric. Low-cost Housing

24.	NIGHSWANDER, Tim	Monrovia	Agric. Information
25.	, Vickie	Monrovia	Agric. Home Economics
26.	PEARMINE, Larry	Gbedin	Agric. Cooperatives
	, Mary	Gbedin	Education
27.	REIFLER, Ed	Monrovia	Agric. Econ. Planning
	, Kathy	Monrovia	Health
28.	ROCHE, Lisa	Ganta	Agric. Home. Econ.
29.	RUEBER, Dave	Bomi Hills	Agric. Forestry
30.	SERVANT, Greg	Foya Kama	Agric. Cooperatives
31.	SHOUP, Charlotte	Gbarnga	Agric. Home Economics
32.	SMITH, Fran	Monrovia	Agric. Home Economics
33.	STALLINGS, Viola	Kpain	Agric. Home Economics
34.	TSCHESCHKE, Rich.	Juarzon	Agric. Tree Crops
35.	VANZEE, Larry	Sgt. Kollie Town	Agric. Mechanic
	, Rose	Sgt. Kollie Town	Agric. Home Economics
	, Rodger	Sgt. Kollie Town	
	, Rodney	Sgt. Kollie Town	
36.	VOLZ, Tom	Foya Kama	Agric. Cooperatives
	, Melissa	Foya Kama	Education
37.	WILSON, John	Sgt. Kollie Town	Agric. Research
38.	WOJTKWSKI, Paul	Monrovia	Agric. Forestry
39.	ZBYTOVSKY, Bruce	Sgt. Kollie Town	Agric. Mechanic
40.	, Ann	Sgt. Kollie Town	Agric. Home Economics
41.	ZELONIS, Mark	Kahnplae	Agric. Tree Crops
42.	KRAEMER, Richard	Monrovia	University Farm

